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AUTHOR	Longley, Charles
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ABSTRACT

In recent years there has been a steady decline in the number of applications filed for full-time admission to American Bar Association-approved law schools. This study sought to determine what explains interinstitutional variation in application volume for the years 1993 to 1996. Using multivariate regression analysis, the study tested a predictive model that incorporates three institutional characteristics (reputation, tuition, and the starting salaries of graduates). The mode was tested for classes entering law school in the fall of 1993, 1994, 1995, and 1996, with numbers of law schools between 169 in 1994 and 1994 to as high as 176 for 1993. Findings show that more than 70% of the variation in volume can be explained. Differences between public and private law schools are reported. The paper concludes with recommendations for increasing application volume. An appendix contains three tables of detailed study data. (Contains 11 tables and 21 references.) (Author/SLD)

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Who Gets the App? Explaining Law School Application Volume, 1993 to 1996

Charles Longley

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Executive Summary

During the period 1993 to 1996 application for admission to American Bar Association (ABA)-approved law schools declined annually. The yearly decline, however, was not felt equally among all programs. Three factors in particular appear to account for much of the interschool difference in application volume. The two most important predictors are institutional reputation (variously measured) and graduates' starting salaries. Those programs with high "status" and starting salaries fared most favorably in a declining application market. The third factor is the annual cost of tuition. This variable, however, is related to interinstitutional application variation only for private law schools.

Abstract

In recent years there has been a steady decline in the number of applications filed for full-time admission to American Bar Association (ABA)-approved law schools. This study seeks to determine what explains interinstitutional variation in application volume for the years 1993 to 1996. Using multivariate regression analysis, we test a predictive model that incorporates three institutional characteristics ("reputation," tuition, and starting salaries of graduates) and find that upwards of 70% of the variation in volume can be explained. Differences between public and private law schools are reported. The study concludes with recommendations for increasing application volume.

Introduction

Between 1993 and 1996 the number of applications filed for admission to American Bar Association (ABA)-approved law schools fell from over 450,000 to about 340,000. Thus, in the space of four years, there was an almost 25% drop in application volume, approximating the relative decline in applicants themselves.[1] As a result, many law schools found themselves in an increasingly competitive and unstable admission market.

The significance of application volume should not be ignored. In one recent study, volume from 1985 through 1995 was associated with both acceptance levels and one standard measure of academic potential. As application numbers decreased, the percentage of applicants offered admission increased. Further, while the median undergraduate grade-point average (GPA) of first-year classes did not uniformly vary significantly with changes in application volume, the median Law School Admission Test (LSAT) score was associated with swings in applications. As application levels abated, the median LSAT score for entering classes also declined (Longley, 1996). Vestal and Zimmer (1987) also posited a relationship between a declining applicant pool and entering students' quality.

While application volume is of obvious interest to the law school community, little systematic study has been directed to the analysis of this phenomenon. Just why one school receives 10,000 applications, while another receives fewer than 1,000 is of course subject to considerable speculation. One prevalent assumption in the admission arena is that the application process is influenced by widely publicized measures of institutional attributes. *The Official Guide to U.S. Law Schools*, produced by Law School Admission Council; the review of legal education published by *U. S. News & World Report* (hereafter *U.S. News*); and the generic "Best Law Schools" guides provide annual summaries of various law school characteristics. Admission personnel presume that applicants more or less rationally calculate where to apply on the basis of information provided in these publications. To date, however, no one has tested whether the publicized data do serve as predictors of application volume.

This paper examines the significance of three of the published factors in the applications process: academic and professional reputation, starting salaries of graduates, and annual tuition costs. In selecting these variables, we assume that applicants as a group are guided by rationality, choosing a law school that, *ceteris paribus*, provides the most benefit—as measured by prospective earnings and institutional reputation—at the least cost—as measured by tuition.

I would like to acknowledge the significant contributions made to this study by Patricia Tipton Longley, Ph.D.

[1]Data provided by Robert Carr, Law School Admission Council, September 9, 1997.

Method

Using ordinary least squares regression analysis, we test a model that explains cross school variation in application volume as a function of variation in three independent variables: the reputation of the law school, the starting salary of graduates, and annual tuition charge. The model is:

$y = a + b_1x_1 + b_2x_2 + b_3x_3 + e$;
where y = application volume, a = a constant, x_1 = institutional reputation,
x_2 = salary, x_3 = tuition, and e = error term.

Our dependent variable, application volume, is operationalized as the number of applications reported to the ABA's Office of the Consultant on Legal Education. Institutional reputation is defined as the average of academic and professional scores reported by *U.S. News* in its annual review of law schools.[2] Salary is defined as the median starting wage of graduates as reported in *U.S. News*.[3] Tuition is the cost per year for a full-time student as reported in *The Official Guide to U.S. Law Schools*, published annually by the Law School Admission Council.[4] Our population is full-time students applying for admission to ABA-approved law schools in the United States.[5]

The model was tested for the classes entering law school in the fall of 1993, 1994, 1995, and 1996.

Results

Initial Analysis

As Table 1 suggests, our model successfully explains differences in application volume from school to school (1993 $F = 95.4$, $p < .0001$; 1994 $F = 98.5$, $p < .0001$; 1995 $F = 99.5$, $p < .0001$; 1996 $F = 127.7$, $p < .0001$). For the years 1993, 1994, 1995, and 1996, the variables "reputation," "salary," and "tuition" account for approximately two-thirds of the variation in application volume (1993 adjusted $R^2 = .626$; 1994 adjusted $R^2 = .642$; 1995 adjusted $R^2 = .638$; 1996 adjusted $R^2 = .690$).[6] The implications of this finding, though perhaps self-evident, should be neither overlooked nor underemphasized. Application to law school is not a random process. Widely available measures of school attributes can be used to predict and explain the volume of applications received by a school.

In each of the four years studied it is evident that all three independent variables are statistically significant predictors (1993 Reputation $t = -2.92$ $p < .01$, Salary $t = 6.47$ $p < .0001$, Tuition $t = 4.45$ $p < .0001$; 1994 Reputation $t = -3.63$ $p < .001$, Salary $t = 6.67$ $p < .0001$, Tuition $t = 3.12$ $p < .01$; 1995 Reputation $t = -3.00$ $p < .01$, Salary $t = 7.70$ $p < .0001$, Tuition $t = 3.72$ $p < .001$; 1996 Reputation t -2.15 = $p < .05$, Salary $t = 9.66$ $p < .0001$, Tuition $t = 2.70$ $p < .01$).[7] For each increment of reputation, a school could expect an increase of between three and eight applications. For every $100 rise in graduates' starting salary, a school could expect a growth in volume of about six applicants. Finally, for every $100 more it charges in tuition, a school nets an increase of approximately three to seven applications.[8]

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[2]The data for the class entering fall 1993 are taken from the March 1992 issue, for fall 1994 the data are from the March 1993 issue, and so forth. This assignment was made in appreciation of the timing that associates with the application cycle.

[3]Starting salary figures refer to the median reported for the previous year's graduating class. In 1997 *U.S. News* dropped starting salary data. Thus the 1993 issue refers to the salary of the class of 1992, and so forth.

[4]Tuition figures are not for the current year. The 1993 volume contains tuition data for fall 1991, the 1994 guide refers to fall 1992 tuition, and so forth. In-state rates were used for public schools.

[5]Given the particular focus of this study, ABA-approved law schools in Puerto Rico were not included.

[6]Although one might expect an intercorrelation between reputation and salary, tolerances and VIFs all are within acceptable ranges.

[7]As can be noted, the findings for rank are in negative numbers. This is because a "lower" reputational rating is by convention associated with a "higher" standing.

[8]Each of these calculations is based on a reading of the regression coefficient ("b") reported in Table 1.

TABLE 1

Determinants of application volume, 1993–1996, all law schools

	Reputation		Salary		Tuition			
Year (N)	*b*	β	*b*	β	*b*	β	Mult. R.	Adj. R^2
1993 (176)	-6.387**	-.208	.062**	.503	.066**	.238	.796**	.626**
1994 (169)	-8.058**	-.251	.066**	.512	.046**	.169	.801**	.642**
1995 (169)	-5.272**	-.196	.058**	.555	.044**	.199	.803**	.638**
1996 (172)	-3.287*	-.132	.067**	.668	.027**	.137	.834**	.690**

* $p < .05$ level for two-tailed test. ** $p < .01$ level for two-tailed test.

Of the three factors, reputation, salary, and tuition, salary is clearly the most important. It is more than twice as important as either reputation or tuition in each of the years examined. The latter two factors, reputation and tuition, are of relatively equal significance, except in 1996, when reputation has a greater impact than does tuition.[9] Thus, the data suggest that the single best way for a school to expand its applicant pool is to improve its placement performance. The higher the starting salaries its graduates receive, the greater the number of applications a school can expect to command.

These findings prompt at least two questions. First, why does higher tuition associate with higher application volume? Second, why is reputational status no more important than it is?

In answer to the first question we suggest that applicants may see tuition as a surrogate for resources expended on their education. Law school guides, for example, do not discuss, much less assess, such budgetary matters as faculty compensation or student services. Confronted with an absence of information, the applicant may operate under a condition of "bounded rationality" and infer that higher tuition means better teaching and services. Somewhat ironically, under this assumption, it follows, *ceteris paribus*, that if an institution raised its costs, it would get more applicants.[10]

The second question is, perhaps, the more perplexing. It is a virtual truism within the admission community that an institution's reputational standing dramatically affects its application rate. Yet, in reality, reputational status appears to have far less impact than might have been expected. Arguably, it could be that this mode of "professional celebrity" is in fact overblown in its reputed significance. That is, a student may place far more weight on prospective salary than on institutional reputation.

On the other hand, we should not ignore the possibility that our finding is a result of treating reputation as linearly related to application volume when it is not. If applications are related to the mathematical log of reputation, a transformation which acknowledges the hyperattractiveness of highly rated schools, we find that the importance of prestige increases, as can be seen in Table 2.[11] The model of course continues to explain differences in application volume (1993 $F = 110.5$ $p < .0001$; 1994 $F = 126.4$ $p < .0001$; 1995 $F = 106.2$ $p < .0001$; 1996 $F = 141.3$ $p < .0001$). In fact, the amount of variance explained increases marginally (1993 adjusted $R^2 = .660$; 1994 adjusted $R^2 = .691$; 1995 adjusted $R^2 = .653$; 1996 adjusted $R^2 = .711$).

TABLE 2

Determinants of application volume, 1993–1996, all law schools (reputation logged)

	Logged Reputation		Salary		Tuition			
Year (N)	*b*	β	*b*	β	*b*	β	Mult. R	Adj. R2
1993 (170)	-1,253.173**	-.370	.046**	.369	.065**	.231	.816**	.660**
1994 (169)	-1,683.954**	-.448	.046**	.354	.047**	.170	.835**	.691**
1995 (169)	-771.666**	-.271	.052**	.497	.042**	.186	.812**	.653**
1996 (172)	-731.961**	-.269	.055**	.550	.029**	.147	.846**	.711**

* $p < .05$ level for two-tailed test. ** $p < .01$ level for two-tailed test.

[9]These observations are made following an examination of the standardized regression coefficients ("β") reported in Table 1.

[10]On the other hand, such an occurrence might not result if our model was misspecified.

[11]The regression model now assums the form: $y = a + b_1 \log_1 x_1 + b_2 x_2 + b_3 x_3 + e$, where y = application volume, a = contant, x_1 = reputation, x_2 = salary, x_3 = tuition, and e = error term.

Once again we note that salary is an important factor in explaining application volume. However, in contrast to the findings in Table 1, if reputation is logged, status assumes an equal or greater predictive weight than salary in 1993 and 1994. Curiously, this case does not hold true for 1995 and 1996. Conceivably the attention given to the increased costs of legal education and a tighter labor market may have heightened the importance of salary in an applicant's decisional calculus.

Summary. Thus far we are able to say that a model incorporating measures of institutional reputation, salary, and tuition provides a good fit for the data on application volume. Indeed, when the variable of reputation is transformed to a logged form, the model explains between 65 and 75 percent percent of interinstitutional differences. In other words, our model indicates that three factors alone—starting salary of graduates, institutional reputation, and tuition—largely determine variations in application volume. Two variables—salary and reputation—are the more powerful predictors; tuition remains statistically significant, but it carries less of an impact on volume.

We should note that there are three schools that stand apart from their institutional counterparts in the sense that reputation, salary, and tuition do not always accurately explain their application volume. Statistically speaking these institutions are known as "outliers," meaning that they have an application volume that is far different from that predicted by our model.[12] One school is an outlier all four years, a second program a deviant for three years, and the third program is an outlier for one year. In each case the institution in question received more applications than would be expected given the specifications of our model. All three schools are located in the nation's capital, suggesting that being situated in Washington, DC imparts a benefit beyond that provided by reputation, salary, and cost.

Examining Public and Private Institutions

It is part of the conventional wisdom in law school admission circles that public and private institutions operate under a different set of constraints, the most obvious of which is the cost of matriculation. Public law schools are not self-governing entities; matters such as fee structures are subject to the direction of state legislatures whose decisions are made in a larger public context. But, as agencies of the state, these law schools receive public revenues and are thus able to offer their education programs at a lower cost to residents of the state.

Private programs, on the other hand, are governed by Boards of Trustees who determine costs, admission policies, and the array of services to be provided. Lacking a public subsidy, these institutions typically charge matriculants more in order to meet operating costs. For the four years covered by this study, private tuition costs averaged about $10,000 more per year than those in the public sector; these programs averaged about 20 more entering students per year.

Thus, it may benefit our inquiry to sort public and private institutions into separate populations. This approach will enable us to determine if our model applies equally well to both types of schools and also to investigate if the influence of reputation, salary, and tuition differs depending on whether a law school is public or private in character. These questions can be pursued by examining the data in Tables 3 and 4.[13]

For public schools our model successfully explains differences in application volume (1993 $F = 61.2$ $p < .0001$; 1994 $F = 62.9$ $p < .0001$; 1995 $F = 53.1$ $p < .0001$; 1996 $F = 67.4$ $p < .0001$). Between 1993 and 1996, about 70% of the variation could be accounted for by the variables in our model.[14] For public law schools it is evident that reputation and starting salary are the most crucial explanatory factors; each carries a roughly equivalent weight in explaining application volume in three out of four years. It is only in the last year that salary assumes a more important role than reputation. In all four years, a $100 rise in the median starting salary of graduates would produce a gain of about five or six applicants.

[12]Testing the model with outliers excluded does not significantly affect the results.

[13]A dummy variable analysis of the data (in which school type is the dummy) suggests that there is a statistically significant difference between public and private schools. However, in order to perform this analysis, it was necessary to drop the tuition variable because of collinearity between "type of program" and "tuition." Given the loss of information associated with the replacement of tuition with a nominal variable, we elected to subdivide the population. The results of the dummy variable analysis are contained in Appendix A of this paper.

[14]Only one outlier was identified among public schools; it appeared in only two of the four years being examined.

TABLE 3

Determinants of application volume, 1993–1996, public law schools (reputation logged)

	Logged Reputation		Salary		Tuition			
Year (N)	*b*	β	*b*	β	*b*	β	Mult. R	Adj. R^2
1993 (74)	-1,440.014**	-.434	.059**	.472	-.018	-.025	.851**	.712**
1994 (74)	-1,659.477**	-.437	.062**	.474	-.026	-.040	.854**	.718**
1995 (74)	-1,363.341**	-.483	.051**	.506	-.091*	-.162	.834**	.682**
1996 (75)	-945.908**	-.356	.061**	.628	-.049	-.130	.860**	.729**

* $p < .05$ level for two-tailed test. ** $p < .01$ level for two-tailed test.

TABLE 4

Determinants of application volume, 1993–1996, private law schools (reputation logged)

	Logged Reputation		Salary		Tuition			
Year (N)	*b*	β	*b*	β	*b*	β	Mult. R	Adj. R^2
1993 (96)	-754.948*	-.231	.037**	.300	.209**	.378	.810**	.645**
1994 (95)	-1,331.762**	-.371	.033**	.255	.181**	.299	.829**	.676**
1995 (95)	-331.935	-.122	.046**	.440	.172**	.342	.817**	.657**
1996 (97)	-558.963*	-.211	.047**	.459	.117**	.266	.847**	.709**

* $p < .05$ level for two-tailed test. ** $p < .01$ level for two-tailed test.

As one might expect, at schools where the public subsidizes the cost of education, tuition tends to disappear as a predictor (1993 t = -.35 *p* ns; 1994 t = -.58 *p* ns; 1995 t = -2.07 $p < .05$; 1996 t = -1.80 *p* ns). Costs apparently are so low, and sufficiently uniform across states, that they are unable to explain differences in application volume.[15] However, tuition does appear to be statistically significant, though relatively unimportant, in one year, 1995. Interestingly, in this case, tuition is *negatively* associated with application volume, a finding that is congruent with our initial supposition that applicants would seek to minimize the cost of their legal education. The inference from this finding is that if public law schools were to charge less for tuition, they *might* increase the number of admission seekers.[16]

Our model also successfully explains variation in application volume for private schools (1993 F = 58.6 $p < .0001$; 1994 F = 66.5 $p < .0001$; 1995 F = 60.9 $p < .0001$; 1996 F = 78.9 $p < .0001$). For private schools we explain between 65 and 71% of variation in application numbers.[17] From the data in Table 4 we can see that all three of our predictor variables exercise a statistically significant effect on our dependent variable. In the first two years of the period, 1993 and 1994, there is no consistency in the relative importance of predictors. Tuition is the most important predictor in 1993, followed by salary and reputation; reputation is the most important predictor in 1994, followed by tuition and salary. In the latter two years, however, it is clear that earning potential emerges as the single most important explanatory factor, followed by tuition and our transformed measure of institutional repute. Indeed, in 1996, salary could be said to be twice as consequential as reputation or tuition in determining application volume.

The role of tuition in explaining volume at private schools is particularly noteworthy. Tuition is found to be statistically significant for each year, and it is always the first or second most influential determinant of volume. However, unlike the pattern at public schools, an increase in fees results in an *increase* in application volume. For every $100 more in charges, between 11 and 21 more applications were filed. As we

[15]We should note that there is a statistically significant difference all four years in the partial correlation between tuition and applications for public schools and the partial correlation between tuition and applications for private schools.

[16]The emphasis is on "might" simply because there was no significant relationship between tuition and application volume in three of the four years. However, we should note that the relationship between tuition and applications is negative, though not necessarily significant, for each of the four years.

[17]There are two outliers among the private schools. Both are located in Washington, DC, and both appear in all four years.

have suggested above, tuition may act as a proxy for budgetary information to which the applicant has no access. Thus, we are led to conclude that at least within the private school arena, a costlier legal education is seen as more attractive.[18]

Summary. The admission equation for public and private schools has much in common. At each both salary and institutional distinction affect the volume of applications submitted. The higher the salary and the more prominent the program, the greater the number of candidates that seek admission. We should note that in all four years there is no statistically significant difference between the impact of salary on public and private schools' application numbers. Further, the effect of reputation on public and private schools is statistically similar in three of four years.[19]

When it comes to tuition, however, a divide emerges that distinguishes public and private programs.[20] For state-related schools, application volume may be increased by lowering costs; for private schools, the opposite is true. Further, tuition influences the application process far more at private schools. Among public programs, tuition was significant in its effect only in 1994 when a $100 lower tuition yielded nine more applicants. At private schools, tuition was significant in each year; a $100 higher tuition yielded between 12 and 21 more candidates depending on the year.

A Note on the Measurement of Reputation

As we have indicated above, the measure of "reputation" used in this study was adapted from *U.S.News*'s annual ranking of law schools. However, that ranking and particularly its assessment of *reputation*, has been attacked along several lines. First, critics argue that the panel of teachers, lawyers, and judges employed to evaluate schools is unrepresentative. For example, as noted by University of Texas law professor Bruce Leiter, *U.S.News* does not attempt to balance the panel by geographic or educational background. He writes, "Schools with large numbers of graduates on today's faculty should benefit from the bias of their loyal evaluation alums" (Leiter, 1997). Further, since *U.S.News* provides its judges with no information on the institutions evaluated (such as a listing of current faculty or their scholarship), some ratings may be based on guesswork or misinformation, and therefore lack either reliability, validity, or both (Leiter, 1997).

One response to the inadequacies of the *U.S. News* technique is the denunciation of the entire ranking enterprise. Indeed, in 1997 after a major data error by *U.S. News*, the deans of 150 law schools took the unprecedented step of publicly damning ranking, and revoiced the ABA's own cautionary statement on the futility of this enterprise (Quibell, 1997).

A second response is the emergence of efforts to rank schools employing approaches that draw upon "objective" measures. For example, as part of their examination of the role of race and gender in institutional hiring, Professors Deborah Jones Merritt and Barbara F. Reskin added an objective measure of student quality (the median LSAT score) to the academic reputation scale used by *U.S News* (Merritt & Reskin, 1997). Leiter also used academic reputation scores as one component of his "educational quality" assessment of law schools and added a second impressionistic measure, student satisfaction with teaching. These subjective measures then were supplemented by two objective measures of faculties' scholarly and professional recognition and two objective measures of student quality (LSAT scores and GPA medians) (Leiter, 1997). Finally, law and graduate business student John Wehrli undertook to construct his own ranking of law schools by compiling previous ranking efforts and constructing a composite score card of his own (Wehrli, 1997).

It is important to note that none of these rankings abandon subjective rating altogether; as Leiter acknowledges, the *U.S News* assessment is the only annual evaluation of academic reputation. What each suggests is simply a modification of the *U.S. News* ranking to include objective indicators implicitly less subject to methodological criticism.[21]

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[18]It is possible, of course, that our model fails to include a variable that would reverse the impact of tuition. However, among undergraduate admission personnel, reference is made to the "Chivas Effect" to connote the belief that "if it costs more, it must be worth it."

[19]There was a statistically significant difference between the regression coefficients for reputation among public and private schools in 1994.

[20]We should note there *was* a statistically significant difference between the regression coefficients for "tuition" at public schools and the regression coefficients for "tuition" at private schools all four years.

[21]For rankings developed solely from objective indicators, see Brennan (1996) and Cullen and Kalberg (1995).

The introduction of objective data to capture institutional differences arguably constitutes an advance over a purely subjective approach to ranking law schools.[22] Certainly, it is reasonable to assume that an applicant's assessment of institutional merit may be based on more than reputation alone. Factors such as the student's median GPA and LSAT score, faculty publications, student-faculty ratio, and the volume of library holdings each provides a means to evaluate the quality of law school education. However, the alternatives proposed to date may be of limited utility in predicting the application volume at ABA-approved law schools. First, most of the efforts restrict rankings to "top tier" institutions. Predicting application volume at all schools requires a measure of quality at the range of ABA-approved law schools. Secondly, some of the rankings include indicators of quality inaccessible to most applicants and, thus, indicators that are unlikely to affect behavior.

A Revised Measure of Reputation. As an alternative to a purely subjective measure of merit, we propose to test the predictive utility of a ranking which includes both the *U.S. News* subjective indicator and three objective measures. In order to increase the probability that they are causally linked to application volume, the objective measures must be widely available to potential applicants and also must gauge the merit of all 170-plus ABA-approved law schools.

Three objective indicators that meet these two strictures are volume of library holdings, median GPAs of incoming students, and median LSAT scores of incoming students.[23] The first indicator attempts to tap institutional resources, the second and third attempt to measure the academic quality of the student body. Thus, institutional "reputation" now becomes a composite measure derived from adding a school's score on the *U.S. News* reputational ranking to its rank on median GPA, rank on median LSAT score, and rank on volume of library holdings.[24] The model remains:

$y = a + b_1x_1 + b_2x_2 + b_3x_3 + e$;
where y = application volume, a = a constant, x_1 = institutional ranking,
x_2 = salary, x_3 = tuition, and e = error term.

The addition of objective indicators to our original formulation of reputation might be expected to increase the explanatory power of our model. However, as can be seen in Table 5, this is not the case for public institutions. (For the revised model the adjusted R^2s are .672, .653, .702 for 1994, 1995, and 1996 respectively; for the original model the adjusted R^2s are .718, .768, and .729.) Nevertheless, the reconfigured measure is significant in all three years examined (1994 $F = 61.2$ $p < .0001$; 1995 $F = 46.2$ $p < .0001$; 1996 $F = 58.3$ $p < .0001$). Salary continues to have the greatest impact on application volume, but rank also plays a substantial role. As was the case in the earlier analysis, tuition does not significantly affect application variances.

TABLE 5

Determinants of application volume, 1994–1996, public law schools (revised ranking logged)

	Logged Revised Ranking		Salary		Tuition			
Year (N)	*b*	β	*b*	β	*b*	β	Mult. R	Adj. R^2
1994 (71)	-901.018*	-.256	.081**	.612	-.014	-.020	.829**	.672**
1995 (73)	-1,202.252**	-.385**	.055**	.550	-.055	-.099	.817**	.653**
1996 (74)	-789.605**	-.280**	.063	.651	-.029	-.077	.845**	.702**

* $p < .05$ level for two-tailed test. ** $p < .01$ level for two-tailed test.

[22]We should note, in this regard, that *U.S. News* incorporates objective indicators in its overall ranking of law schools.

[23]There is only one other possible indicator of objective quality that is widely available and ranges across all law schools: student-faculty ratio. Initially we included this indicator in our measure of rank. However, adding student-faculty ratio tends to decrease the impact of rank on application volume.

[24]Library figures were recorded from the *Official Guide to U.S. Law Schools*, years noted supra.; LSAT score and GPA data were obtained from Van Tuyl (1993, 1994, 1995). While the validity of this source's figures is open to dispute, we found only a small percentage of cases were widely disparate from the data obtained from the ABA's Office of the Consultant on Legal Education. Moreover, not all law schools provided GPA/LSAT score data to the *Official Guide to U.S. Law Schools*. Our effort here is not necessarily to obtain the most accurate objective measures so much as to have measures that are widely available and used by applicants.

An examination of private schools, presented in Table 6, reveals that the model with a modified measure of rank explains virtually the same amount of variance as the original model. (For the revised model the adjusted R^2s are .663, .665, .and 716 for 1994, 1995, and 1996 respectively; and .676, .657, and .709 for the original model.) The revised operationalization of rank is significant for all three years being examined (1994 $F = 48.9$ $p < .0001$; 1995 $F = 61.2$ $p < .0001$; 1996 $F = 79.2$ $p < .0001$). Moreover, the impact of rank relative to salary and tuition appears to be greater than when objective indicators were excluded, although salary remains the most powerful determinant in 1995 and 1996.

TABLE 6

Determinants of application volume, 1994–1996, private law schools (revised ranking logged)

	Logged Revised Ranking		Salary		Tuition			
Year (N)	*b*	β	*b*	β	*b*	β	Mult. R	Adj. R^2
1994 (93)	-1,196.609**	-.333	.036**	.274	.193**	.315	.821**	.663**
1995 (92)	-666.682*	-.218	.040**	.377	.162**	.319	.822**	.665**
1996 (94)	-920.487**	-.318	.037**	.361	.117**	.263	.852**	.716**

* $p < .05$ level for two-tailed test. ** $p < .01$ level for two-tailed test.

While it is clear that adding objective indicators to our original conception does not increase explanatory power, the revised model does not lose explanatory power either. The impact of rank may decrease in the public school environment; however, the decline does not appear to be significant. In the private arena, rank may actually increase its impact on applications.

But, perhaps most interesting for critics of the *U.S.News* based measure, if we *exclude* the subjective measure of rank and rely only on a composite of the three objective indicators, ranked, the model continues to fit the data well (public: 1994 $F = 47.6$ $p < .0001$; 1995 $F = 43.5$ $p < .0001$; 1996 $F = 56.0$ $p < .0001$; private: 1994 $F = 61.5$ $p < .0001$; 1995 $F = 62.1$ $p < .0001$; 1996 $F = 79.8$ $p < .0001$). The amount of variance explained by the revised model remains virtually unchanged. As can be seen from the data in Tables 7 and 8, this finding holds for both public and private institutions.[25]

TABLE 7

Determinants of application volume, 1994–1996, public law schools (revised ranking logged, excluding subjective measure)

	Logged Revised Ranking		Salary		Tuition			
Year (N)	*b*	β	*b*	β	*b*	β	Mult. R	Adj. R^2
1994 (71)	-699.924	-.203	.087**	.660	-.015	-.022	.825**	.666**
1995 (73)	-1,066.003**	-.343	.058**	.582	-.053	-.095	.809**	.639**
1996 (74-)	-696.535*	-.242	.066**	.678	-.026	-.070	.840**	.693**

* $p < .05$ level for two-tailed test. ** $p < .01$ level for two-tailed test.

[25]Each of the three objective indicators we employ is suitable for interval measurement. If the indicators are standardized and combined, the resultant composite measure can be conceptualized as an interval measure of "merit." When merit, treated linearly, is substituted for reputation in our formula, the model explains from 59% to 67% for public schools and from 67% to 73% of the variation in application volume. Salary is the only significant factor for public schools; it appears in all three years. For private schools, all three variables are significant in all three years. All three factors are about the same importance; see Appendix B for results.

TABLE 8

Determinants of application volume, 1993–1996, private law schools (revised ranking logged, excluding subjective measure)

	Logged Revised Ranking		Salary		Tuition			
Year (N)	*b*	β	*b*	β	*b*	β	Mult. R	Adj. R^2
1994 (93)	-1,189.602**	-.327	.036**	.276	.199**	.324	.821**	.664**
1995 (92)	-724.149*	-.236	.038**	.364	.162**	.319	.824**	.668**
1996 (94)	-925.460**	-.322	.037**	.361	.117**	.262	.853**	.718**

* $p < .05$ level for two-tailed test. ** $p < .01$ level for two-tailed test.

In addition, the impact of the three variables, rank, salary, and tuition, remains quite similar whether rank includes or excludes the subjective indicator. Prospective salary seems to drive the variations observed among public schools. In all three years the higher the salary reported, the greater the number of applications received. As one might also expect in the public arena, tuition does not have a significant influence on application volume. Among private programs, however, rank, salary, and tuition are of approximately equal weight. The higher the rank, salary, and tuition, the greater the number of applications received. The implication of Tables 7 and 8 is clear: it's possible to provide meaningful measures of institutional rank, measures which have construct and predictive validity, without relying on methodologically suspect and subjectively determined alternatives.

Discussion and Conclusions

The present study examined the extent to which variation in application volume across ABA-approved law schools for the years 1993 through 1996 is subject to systematic explanation. Our findings reveal that a substantial degree of the application variation between institutions—upwards of 70%—could be explained by three variables: institutional reputation, starting salaries of graduates, and tuition costs. Furthermore, it is evident that salary and reputation, respectively, are persistently the most important factors. While tuition also is significant, this factor is less powerful in its effect.

When we separated our law school population into public and private cohorts we found that both sets were affected by institutional reputation and starting salaries. Tuition, however, operated differently. For public schools price typically appears to have no statistically significant effect on variation in application volume. By way of contrast, at private schools cost significantly affects application numbers to the advantage of more expensive programs.

Given the criticism directed toward the use of subjective measures of reputation, such as that employed by *U.S. News* (and adapted for use in our study), we set about to determine if adding objective measures to "rank" would enhance the predictive power of our original model. But, no change in the variation accounted for emerged when two standards of student achievement and one gauge of institutional stature were included; our individual predictors tended to operate as they did when the subjective measure alone was used.

Strikingly, however, when we dropped the reputational measure, these three objective criteria (along with salary and tuition) explained a degree of application variance comparable to that accounted for by the subjective measure. In other words, it is not necessary to rely on methodologically suspect measures of "rank" in order to explain and predict application volume.

Of course, if objective measures of institutional "rank" are not reliable and valid, they make poor substitutes for *U.S. News's* reputational assessment. In this respect, then, the availability of additional objective measures of institutional differences, such as those found in the ABA's new publication *Approved Law Schools* (Morgan & Snyder, 1997) is timely and fortuitous.[26] As this work gains wider circulation, applicants will be afforded an alternative to the profiles produced by profit sector vendors and therefore be able to make more informed choices.

[26]For a discussion of the events leading up to this publication, see Read (1995).

Law schools may well face a competitive admission environment for the foreseeable future. What, then, can an individual institution do to attract applicants? Our findings repeatedly reveal the significance of starting salaries.[27] As the cost of legal education rises, rationality obviously dictates there be the prospect of a "reasonable return on investment." Our findings dictate that no schools, and particularly those in the public realm, can afford to ignore the significance of career placement for application volume.

It also is evident that schools must work to attract an even more talented student body. For some, of course, this objective is a veritable truism. What is novel, however, is our insight that stronger academic credentials of entering classes can account for application growth. Thus, it seems reasonable to suggest that schools make additional grant and scholarship money available to their strongest candidates.

Our finding that institutional resources, operationalized as library holdings, are causally related to application volume also may be instructive. Thus, it is important that law schools not be seen as "cash cows" without need of continual investment in physical and human assets.

What about the cost of legal education? However anomalous it may seem, those private law schools with steeper tuition are advantaged in the application market. For public programs, by way of contrast, a discounted pricing policy may work to attract more applicants. Thus, our findings would suggest that differently situated law schools may find it prudent to approach pricing matters from quite different perspectives.

Our study indicates that over two-thirds of the variation in law school application volume can be explained by three variables: institutional standing, starting salaries, and tuition. Thus, law school administrators should not be tempted simply to conclude that admission personnel need to "work harder" at recruitment. On the contrary, while admission professionals may be effective on the margin (after all, 30% of the variance remains unexplained), our study suggests that a large proportion of admission volume is determined by forces beyond their control. Arguably, the most rational course of action for law schools in an adverse admission climate is to invest in their placement services, their physical and professional resources, and their students.

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[27]Salary data can be misleading, of course, given graduates' careers and variations in costs of living. Given the significance of this variation in application volume, however, it may well be appropriate for salary information to be incorporated into the ABA's guide to law schools. At the very least this would assure uniformity in reporting.

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Appendix A

TABLE A1

Determinants of application volume, all schools, 1993 to 1996, dummy variable routine[1]

	Dummy Variable		Reputation		Salary			
Year (N)	*b*	β	*b*	β	*b*	β	Mult. R	*p*
1993 (176)	-415.500**	-.1440	-1,318.1**	-.3889	.0529**	.4269	.801**	.636
1994 (169)	-329.957*	-.1080	-1,720.54**	-.4560	.0516**	.3970	.824**	.674
1995 (169)	-334.44*	-.1267	-809.71	-.2834	.0567**	.5444	.802**	.637
1996 (172)	-253.01**	-.103	-735.7**	-.2699	.060**	.598	.842**	.70

* $p < .05$ level for two-tailed test. ** $p < .01$ level for two-tailed test.

[1] Where 0 = private law school and 1 = public law school.

Appendix B

TABLE B1

Determinants of application volume, public schools, 1994 to 1996, merit measured as interval variable

	Tuition		Merit		Salary			
Year (N)	*b*	β	*b*	β	*b*	β	Mult. R	Adj. R^2
1994 (169)	-.022	-.031	47.322	.031	.106**	.805	.817**	.652
1995 (169)	-.054	-.097	265.184	.190	.068	.688	.781**	.592
1996 (172)	-.037	-.098	95.319	.073	.080**	.822	.826**	.669

* $p < .05$ level for two-tailed test. ** $p < .01$ level for two-tailed test.

TABLE B2

Determinants of application volume, private schools, 1994 to 1996, merit measured as interval variable

	Tuition		Merit		Salary			
Year (N)	*b*	β	*b*	β	*b*	β	Mult. R	Adj. R^2
1994 (169)	.188**	.306	606.810**	.349	.036**	.279	.827**	.673
1995 (92)	.149**	.293	437.999**	.294	.036**	.346	.833**	.684
1996 (94)	.119**	.266	484.814**	.344	.035**	.347	.858**	.727

* $p < .05$ level for two-tailed test. ** $p < .01$ level for two-tailed test.

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